

2004-2005 No Child Left Behind - Blue Ribbon Schools Program

U.S. Department of Education

Revised 3-31-05

Cover Sheet

Type of School: ☐ Elementary ☐ Middle ☒ High ☐ K-12

Name of Principal Mr. Edward Argueta
(Specify: Ms., Miss, Mrs., Dr., Mr., Other) (As it should appear in the official records)

Official School Name The Science Academy of South Texas
(As it should appear in the official records)

School Mailing Address 900 Med High Drive
(If address is P.O. Box, also include street address)

Mercedes Texas 78570-9701
City State Zip Code+4 (9 digits total)

County Hidalgo School Code Number* 031916005

Telephone (956) 565-2454 Fax (956) 565-9112

Website/URL http://www.stisd.net E-mail edward.argueta@stisd.net

I have reviewed the information in this application, including the eligibility requirements on page 2, and certify that to the best of my knowledge all information is accurate.

(Principal's Signature) Date _____

Name of Superintendent* Dr. Marla Guerra
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

District Name South Texas Independent School District Tel. (956) 565-2454

I have reviewed the information in this application, including the eligibility requirements on page 2, and certify that to the best of my knowledge it is accurate.

(Superintendent's Signature) Date _____

Name of School Board President/Chairperson Mr. Eduardo Gonzalez
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this package, including the eligibility requirements on page 2, and certify that to the best of my knowledge it is accurate.

(School Board President's/Chairperson's Signature) Date _____

PART I - ELIGIBILITY CERTIFICATION

[Include this page in the school's application as page 2.]

The signatures on the first page of this application certify that each of the statements below concerning the school's eligibility and compliance with U.S. Department of Education, Office of Civil Rights (OCR) requirements is true and correct.

1. The school has some configuration that includes grades K-12. (Schools with one principal, even K-12 schools, must apply as an entire school.)
2. The school has not been in school improvement status or been identified by the state as "persistently dangerous" within the last two years. To meet final eligibility, the school must meet the state's adequate yearly progress requirement in the 2004-2005 school year.
3. If the school includes grades 7 or higher, it has foreign language as a part of its core curriculum.
4. The school has been in existence for five full years, that is, from at least September 1999 and has not received the 2003 or 2004 *No Child Left Behind – Blue Ribbon Schools Award*.
5. The nominated school or district is not refusing the OCR access to information necessary to investigate a civil rights complaint or to conduct a district-wide compliance review.
6. The OCR has not issued a violation letter of findings to the school district concluding that the nominated school or the district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if the OCR has accepted a corrective action plan from the district to remedy the violation.
7. The U.S. Department of Justice does not have a pending suit alleging that the nominated school, or the school district as a whole, has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
8. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the school or school district in question; or if there are such findings, the state or district has corrected, or agreed to correct, the findings.

PART II - DEMOGRAPHIC DATA

All data are the most recent year available.

DISTRICT (Questions 1-2 not applicable to private schools)

1. Number of schools in the district:

0 Elementary schools
0 Middle schools
0 Junior high schools
4 High schools
0 Other

4 TOTAL
2. District Per Pupil Expenditure: \$13,007 (Science Academy's = \$8,154)
 Average State Per Pupil Expenditure: \$8,029

SCHOOL (To be completed by all schools)

3. Category that best describes the area where the school is located:

☐ Urban or large central city
☐ Suburban school with characteristics typical of an urban area
☐ Suburban
☒ Small city or town in a rural area
☐ Rural
4. 5 Number of years the principal has been in her/his position at this school.
 _____ If fewer than three years, how long was the previous principal at this school?
5. Number of students as of October 1 enrolled at each grade level or its equivalent in applying school only:

Grade	# of Males	# of Females	Grade Total	Grade	# of Males	# of Females	Grade Total
PreK				7			
K				8			
1				9	136	71	207
2				10	115	61	176
3				11	88	55	143
4				12	63	34	97
5				Other			
6							
TOTAL STUDENTS IN THE APPLYING SCHOOL →							623

[Throughout the document, round numbers to avoid decimals.]

6. Racial/ethnic composition of the students in the school:
- | | |
|-------------------|----------------------------------|
| <u>25</u> | % White |
| <u>1</u> | % Black or African American |
| <u>66</u> | % Hispanic or Latino |
| <u>8</u> | % Asian/Pacific Islander |
| <u>0</u> | % American Indian/Alaskan Native |
| 100% Total | |

Use only the five standard categories in reporting the racial/ethnic composition of the school.

7. Student turnover, or mobility rate, during the past year: 7 %

(This rate should be calculated using the grid below. The answer to (6) is the mobility rate.)

(1)	Number of students who transferred <i>to</i> the school after October 1 until the end of the year.	13.0
(2)	Number of students who transferred <i>from</i> the school after October 1 until the end of the year.	30.0
(3)	Subtotal of all transferred students [sum of rows (1) and (2)]	43.0
(4)	Total number of students in the school as of October 1	623.0
(5)	Subtotal in row (3) divided by total in row (4)	.069
(6)	Amount in row (5) multiplied by 100	6.9

8. Limited English Proficient students in the school: 2 %
11 Total Number Limited English

Proficient

Number of languages represented: 2

Specify languages: Spanish & German

9. Students eligible for free/reduced-priced meals: 41 %

Total number students who qualify: 241

If this method does not produce an accurate estimate of the percentage of students from low-income families or the school does not participate in the federally-supported lunch program, specify a more accurate estimate, tell why the school chose it, and explain how it arrived at this estimate.

10. Students receiving special education services: 6%
39 Total Number of Students Served

Indicate below the number of students with disabilities according to conditions designated in the Individuals with Disabilities Education Act.

<u>1</u> Autism	<u>3</u> Orthopedic Impairment
<u>0</u> Deafness	<u>2</u> Other Health Impaired
<u>0</u> Deaf-Blindness	<u>29</u> Specific Learning Disability
<u>2</u> Emotional Disturbance	<u>4</u> Speech or Language Impairment
<u>1</u> Hearing Impairment	<u>0</u> Traumatic Brain Injury
<u>1</u> Mental Retardation	<u>0</u> Visual Impairment Including Blindness
<u>0</u> Multiple Disabilities	

11. Indicate number of full-time and part-time staff members in each of the categories below:

Number of Staff

	<u>Full-time</u>	<u>Part-Time</u>
Administrator(s)	<u>3</u>	<u> </u>
Classroom teachers	<u>42</u>	<u>2</u>
Special resource teachers/specialists	<u>4</u>	<u> </u>
Paraprofessionals	<u>6</u>	<u> </u>
Support staff	<u>8</u>	<u> </u>
Total number	<u>65</u>	<u>2</u>

12. Average school student-“classroom teacher” ratio: 13:1
13. Show the attendance patterns of teachers and students as a percentage. The student dropout rate is defined by the state. The student drop-off rate is the difference between the number of entering students and the number of exiting students from the same cohort. (From the same cohort, subtract the number of exiting students from the number of entering students; divide that number by the number of entering students; multiply by 100 to get the percentage drop-off rate.) Briefly explain in 100 words or fewer any major discrepancy between the dropout rate and the drop-off rate. (Only middle and high schools need to supply dropout rates and only high schools need to supply drop-off rates.)

	2003-2004	2002-2003	2001-2002	2000-2001	1999-2000
Daily student attendance	97%	96%	96%	96%	94%
Daily teacher attendance	96%	95%	96%	95%	96%
Teacher turnover rate	0%	11%	2%	2%	12%
Student dropout rate (middle/high)	1%	2%	3%	0%	0%
Student drop-off rate (high school)	1%	2%	2%	1%	1%

14. (**High Schools Only**) Show what the students who graduated in Spring 2004 are doing as of September 2004.

Graduating class size	<u>124</u>
Enrolled in a 4-year college or university	<u>94%</u>
Enrolled in a community college	<u>2%</u>
Enrolled in vocational training	<u> </u> %
Found employment	<u> </u> %
Military service	<u>4%</u>
Other (travel, staying home, etc.)	<u> </u> %
Unknown	<u> </u> %
Total	100 %

Part III - Summary

Located in the Rio Grande Valley of South Texas and in Mercedes, Texas, in particular, The Science Academy of South Texas, affectionately known as Sci. Tech., is a comprehensive four-year public magnet high school. Recognized as one of the finest public high schools in the nation, it is an open-enrollment magnet school that serves twenty-eight school districts in a three-county area, comprising Willacy, Cameron and Hidalgo counties. Established in 1993 to prepare minority students for academic success at the university level, the Science Academy now draws students of various backgrounds and socio-economic status. We presently serve 625 students from grades 9-12. The Science Academy is part of the South Texas I.S.D., an academically recognized district that includes three other magnet high schools. The only requirement for students to attend our school is that they be promoted from their previous grade and that students enrolling must be starting the ninth or tenth grade.

Students are attracted to the Science Academy because of their interest in the math and science areas, as well as the academic emphasis placed on pre-engineering and pre-architecture concepts. It is the mission of The Science Academy to offer a curriculum of choice with an emphasis on science, mathematics and engineering that fosters curiosity, open-mindedness and a passion for life-long learning. Students are also attracted to our school because we offer a safe learning environment where students are treated with dignity and respect, and where teachers genuinely care about their school and their students.

The Science Academy provides a strong college preparatory curriculum, offering the basic core curriculum along with AP, concurrent enrollment, dual enrollment, articulated technology college courses, honors and GT classes, all of which prepare students to compete as future undergraduates in local, state and national elite universities. Our students are also encouraged to perform seventy-five hours of community service, thus promoting responsibility and pride in their local communities. Our goal, supported by partnerships and working relationships with Rice University, Baylor College of Medicine, Rochester Institute of Technology, Project Lead The Way, The University of Texas Pan American, South Texas College and The Dana Center, is to provide a quality yet personal education to all students so that they will achieve both academically and socially.

A very special component of the Science Academy curriculum is the technology program courses that reinforce academic concepts. In working with the Rochester Institute of Technology, The Science Academy has embraced Project Lead the Way, a high school pre-engineering and engineering technology program that supports and enhances our educational vision. Beginning at the freshman grade level and continuing to the twelfth grade, all students are required to take at least one of the five “required electives” that comprise the PLTW program.

The Science Academy does not have a competitive sports program, so students are encouraged to participate in our strong Academic UIL program and in our extracurricular activities. Activities that students are involved in include the National Honor Society, Academic Decathlon, Mu Alpha Theta, Spanish Club, Robotics, CinTech, Mock Trial, Astronomy Club, JETS, Yearbook, Student Council, Masterminds, Student Newspaper and many others.

A dedicated staff, committed students, a supportive educational environment that includes a library staff committed to student service, and a vision that promotes curiosity and passion for learning have resulted in the Science Academy’s being recognized as a Texas Exemplary Campus for eleven consecutive years, ranked 8th best high school in America by Newsweek Magazine in 2003, recipient of the multiple Gold Performance Awards from TEA, and past recipient of the Governor’s High Performance Awards.

The Science Academy of South Texas - committed to the student who accepts the challenges of tomorrow.

Part IV – Indicators of Academic Success

1. Assessment Results

The Texas Assessment of Knowledge and Skills (TAKS) is the criterion reference test designed to be a challenging measure of student progress. It is the foundation of the statewide assessment and accountability program for all public schools in Texas. The base of the TAKS test is the standard curriculum that must be taught in all public schools, the Texas Essential Knowledge and Skills (TEKS).

The Science Academy has been rated as an exemplary campus for eleven straight years, nine based on the Texas Assessment of Academic Skills (TAAS) test results and two on the TAKS test results. TAKS replaced the TAAS, with both tests having similar rating scales based on similar criteria.

Throughout the years, and across the different subgroups, the Science Academy's Reading/Language Arts and Math scores have been around the 90% in all grade levels. Our teachers take pride in their instructional efforts and work closely with administration to insure proper placement of students and instruction that meets the needs of the individuals involved.

In Reading/Language Arts, when our scores dipped for most subgroups in the 2002-2003 school year, we found that some of our instructional efforts and quite a bit of time was spent on student presentations. We found out that we didn't spend as much time in writing exercises and consequently in grammar. We went back to our writing instruction (Schaeffer) that promotes critical thinking and involves all elements of the writing process including grammar. Our 2003-2004 indicates the success of our efforts. We were pleasantly surprised and somewhat intrigued to see scores for all subgroups increase with the exception of the "White" subgroup. We were surprised that the percent passing scores for the "Hispanic" and "Economically Disadvantaged" subgroups surpassed that of the "White" subgroup. We don't have an answer as to why the percent passing of the "White" subgroup decreased instead of increasing but hope that consistency in our instruction produces the desired results in all students and in all subgroups.

The math scores for the 2002-2003 school year also decreased for almost all subgroups. The math department re-evaluated our placement test given to incoming freshmen and re-evaluated the sequence of instruction for all courses. In desegregating test data, we made sure that objectives where students did not do well in were addressed in the instructional efforts of all teachers involved. As evident by the 2003-2004 scores, instruction that focused on proper sequencing and addressed objectives in which students were weak in produced growth in all subgroups. We are especially proud of the increase in the percent of students achieving "commended performance". This percent (commended performance) signifies the number of students achieving mastery at 90% or better on all questions asked on the TAKS test.

We continue working with students that do not meet the standard passing criteria and will continue assessing our instructional efforts. We want to continue having a strong math and language arts program and we want to continue receiving state assessment scores that exceed the 90% passing rate. Our goal is to improve instruction so that it produces a higher percent (75% or better) of "commended performance" in all student subgroups. We will continue to strive for consistency in instructional efforts and consistency in student progress and learning.

PART IV – Indicators of Academic Success

2. Use of Assessment Data to Improve Student and School Performance

Science Academy staff members utilize assessment data in a variety of ways to diagnose individual needs of students and prescribe an intervention plan that will lead to success. During the summer months, administration and support staff review testing information from the previous spring. Areas in need of improvement or objectives in which students performed poorly are identified. Within the first two weeks of school, a meeting with the different departments is held in which assessment data is discussed, strengths are acknowledged, and areas of concern are addressed. This discussion leads to academic interventions and academic planning that will target individual needs of students as well as the collective needs of students.

Interventions and academic planning that lead to student success include:

- Assigning students to English or Math Labs to strengthen foundational areas of weakness and at the same time provide an immediate tutorial period that addresses a student's lack of understanding in his English and/or math classes.
- Assigning students to morning or after-school tutorial classes in his/her area of academic weakness. Teachers address TEKS objectives that give students problems thus strengthening the academic understanding and learning of students.
- Teachers make adjustments to their instructional planning to insure that instruction addresses identified assessment weaknesses, and in particular, addresses those objectives not mastered by our students.
- Students who fail one or more parts of the TAKS are provided with a TAKS Study Guide. Tutorial teachers identify areas in need of intervention for each student and concentrate their tutorial efforts on these needs.
- Instructional interventions may be adjusted following a school "diagnostic" test closely patterned after the state TAKS test. The diagnostic test data goes through an item-analysis review to determine individual student needs. Students in need of intervention are assigned to TAKS tutorial sessions for approximately eight weeks.

PART IV – Indicators of Academic Success

3. Communication of Student Performance

Communicating the educational progress of students to the parents is an important part of the process at The Science Academy and is done on a regular basis. Progress reports for all students are sent to parents every three weeks. This helps parents monitor student progress in each of their eight classes. A report card is sent to parents every nine weeks. This report card is more formal and gives parents a clearer picture of the academic success of their child. The Science Academy also subscribes to K12Planet, an internet-based communication system that connects teachers to parents and consequently to students. Using a password, parents and students can actually view the electronic grade book for each class that the student has, thus viewing up-to-date grades, assignments done or not done, test or quiz grades, their grade average up to that point, and the teacher's e-mail in case the parent or student needs to contact the teacher. Parent/teacher conferences, grade-level newsletters, PLAN and PSAT student test result conferences, Honor and Superior Honor Roll recognition, and Commended Student recognition are a few of the occasions where student academic performance is communicated and recognized.

Every child who takes a state TAKS test gets a report of his or her score. This report is called the Confidential Student Report, or CSR and is sent to parents within two weeks after being received by the school. By carefully examining this report, parents can find out where their child is doing well and where their child may need to improve. This report is a good indicator to parents of their child's progress in learning. The school's rating and percent scores in the different areas tested on TAKS, as well as AP scores, SAT scores, and ACT scores are communicated to parents, students and the community through PTSA meetings, School Open House, School BoardWorks minutes sent to all parents, and by local newspapers to the general public.

PART IV – Indicators of Academic Success

4. Sharing Successes With Other Schools

The Science Academy is proud of its successes and constantly seeks ways to share information that has led to our success. We have an open door policy for school personnel from other districts in the region, state, and from other states seeking information about our school. Among the information that has been shared through visits to our school or presentations made at local, regional, and state conferences includes the following: the four-year course sequence, the ACT/SAT program that has resulted in our students gaining at least 100 more points on their test results, our six course technology (PLTW) program that provides hands on learning and transcribed college credit, our personalized counseling program, the AP and dual credit program that allows many students to graduate from the Science Academy with over 20 hours of college credit (some earning up to 47 hours), and our half-day career-technology program for students with special needs.

The school will continue to utilize its current means of disseminating information that also includes the district newsletter, articles submitted to local newspapers, and information posted on the district and campus website.

Our plans are to broaden our base of sharing student success with other districts by asking the regional service center and the various state administrator associations to establish a network whereby school personnel can communicate and share ideas. Additionally, we plan to approach the regional service center about establishing an electronic regional discussion board whereby the districts in the area can share successes as well as strategies for improving student performance. Utilizing an electronic means to disseminate information and promote communication perpetuates the idea of sharing without having to travel to attend meetings or conferences.

PART V – Curriculum and Instruction

1. The School's Curriculum

The curriculum at The Science Academy of South Texas is designed to meet the goals and interests of students that accept the challenge of the various math and science fields such as engineering, architecture and computer science. The curriculum prepares students for college and introduces them to pre-engineering and pre-architecture concepts. Our students receive excellent educational foundations in language arts, mathematics, science, social studies, computer science, technology applications, and foreign language. Many Science Academy students complete a year or more of study beyond the state requirements in various academic subjects. Students also integrate the knowledge gained in some disciplines with what is learned in the technology classes, thus converting theory to application and having a better appreciation for academic learning.

The Science Academy's language arts curriculum is based on strong literary and writing principles. Students are asked to read increasingly demanding texts for a variety of purposes. Students identify characteristics of various literary forms that include short stories, novels, plays, essays, speeches and poetry. Vocabulary and literary terms are defined and applied to enhance student understanding of literature while fine-tuning their command of the English language. American literature and British literature are analyzed, thus giving students the opportunity to discover the gamut of ideas and literary techniques that have shaped the written word. All students also review and refine their writing skills in areas of mechanics, grammar, spelling, structure, and meaning. Courses that compose the language arts curriculum include college preparation courses, Gifted & Talented, preAP, AP, concurrent enrollment, technical writing, communication applications and advanced journalism.

The mathematics curriculum reinforces the focus of our school and is designed to inspire in our students a greater awareness of the mathematical world in which we live and at the same time develop inductive and deductive reasoning in students. From understanding linear equations, to learning quantitative patterns and relationships, to writing proofs, students learn math, its importance and its application in our daily life. The Science Academy expects all students to take a math course every year. Courses composing the math curriculum include Algebra I & II, Geometry, Geometry PreAP, Pre-Calculus, Pre-Calculus PreAP, Calculus PreAP, Calculus I & II AP, Calculus I & II Concurrent, Statistics AP, Statistics Concurrent, and SAT/ACT.

The science curriculum is based on a hands-on multi-disciplinary approach to learning science. The courses are designed to develop analytical skills, critical thinking, problem solving skills, and higher level thinking skills in students. With accelerated learning in the freshman and sophomore years, students may graduate from the Science Academy with six or more science credits. The Science Academy also expects all students take a science class every year. Courses that make up the science curriculum include Integrated Physics and Chemistry (IPC), Biology, Biology PreAP, Biology AP, Chemistry, Chemistry AP, Environmental Systems, Physics PreAP, Physics B-AP, Physics C-AP, and Environmental Science AP.

The social studies curriculum focuses on the development of the civilized world. Students learn about the major historical events that shaped world cultures, including various government and economic systems, ethical and religious beliefs, and major geographical features. One PreAP and four Advanced Placement courses are part of this curriculum.

Our Foreign Language, Technology, Computer Science, Art, Vocational, and Physical Education Departments have strong curriculums that reinforce the mission of the school. Five Advanced Placement and two PreAP courses are part of the curriculum for these departments.

PART V – Curriculum and Instruction

2. Secondary School – English & Reading

The Science Academy's language arts curriculum is based on strong literary and writing principles. Even before students begin their freshman year at the Science Academy, a summer reading list is sent to prospective students. They are asked to read literary works and view contemporary pieces that provoke thought and opinion. Discussion and future reading assignments build around this initial base. As students progress through each of the grades, they are required to read certain books during the school year as well as during the summer. The selections include various literary forms and become increasingly demanding as students' progress from year to year.

Improving reading and writing is a shared effort at The Science Academy. Not only is this philosophy promoted by the English Department but by all departments. Reading and summarizing technical manuals is emphasized in the Technology Department, deciphering multi-step word problems is the focus in math, describing and presenting lab results is advocated in science, and researching and writing about historical events is promoted in social studies. Many students at the Science Academy graduate with a reading and writing level comparable to a college senior, a tribute to the hard work of dedicated teachers and to the students themselves.

Students found to be reading below grade level or who seem to have difficulty with comprehension are placed in English Labs or asked to attend tutorial sessions, either in the morning and/or after school. Students may also be assigned peer tutors during class time. The peer tutor concept has been particularly helpful in assisting struggling students with reading comprehension. Students reading below grade level because they are struggling with the English language are placed in an English as a Second Language (ESL) class where they receive additional support and assistance.

PART V – Curriculum and Instruction

3. PLTW Curriculum

The faculty and staff at the Science Academy have continuously researched methods by which curriculum renewal can take place. One such research effort led staff to a national high school pre-engineering technology program called Project Lead The Way. PLTW was incorporated into the curriculum because it paralleled and complimented the schools mission.

PLTW has provided the Science Academy a tremendous opportunity to offer students a rigorous program of study that is relevant and timely in today's economy. Students are asked to take at least one course each year out of the six courses that make up the PLTW curriculum. The courses include Introduction to Engineering Design, Digital Electronics, Principles of Engineering, Computer Integrated Manufacturing, Architectural Graphics, and Engineering Design and Development. This four-year sequence of courses, when combined with college preparatory mathematics and science in high school, introduces students to the scope, rigor and discipline of engineering and engineering technology prior to entering college. The impact of this curriculum is in the connection and integration that is established between the regular academic program and the technology program. Some of the benefits to students are as follows:

- Relevant application of math and scientific principles.
- Opportunity to express creativity through project-based learning.
- In-depth application of knowledge.
- Exposure to the latest computer software and equipment.
- Improved performance in academic work.
- Increased written and oral communication skills.
- Opportunity to receive college credit.
- Skills required for jobs and post-secondary education.

Technology teachers are required to attend staff development sessions on an annual basis. These sessions allow teachers to stay current on instructional methodologies, instructional activities and technological advances. This curriculum incorporates concepts and national standards that are updated on a yearly basis. Each course offered extends objectives and activities beyond what is expected by the Texas Education Agency's TEKS requirements.

PART V – Curriculum and Instruction

4. Instructional Methods Used for Improving learning

At Science Academy, instructional strategies are consistent with the school's mission and expectations for student learning. Because the school is an academy and thus a small learning community, teachers are able to provide an instructional environment that encourages and promotes success.

Teachers at The Science Academy are expert in their content areas, extremely knowledgeable about current research on effective instructional approaches, and reflective about their own practice. The average number of years experience for Science Academy teachers is nineteen. Many teachers have master's degrees. Teachers also take advantage of staff development opportunities where they can learn new research-based instructional methodologies.

In delivering instruction, Science Academy teachers utilize instructional practices such as cooperative learning, Socratic dialogue, and independent critical analysis. The emphasis is not just on what students and faculty learn, but how knowledge is applied for the betterment of themselves and others.

Teachers utilize instructional strategies to engage students as active and self-directed learners. Across the curriculum, students experience various hands-on projects, journal writing, brainstorming, team projects, debates, demonstrations, simulations, role-playing, computer-based presentations, research presentations, science projects and leadership opportunities that enhance learning.

The increased utilization of all forms of technology has also played a big role in improving instruction and consequently student learning. Students are routinely exposed to scientific software, engineering and architectural software, graphing calculators, computers for internet-based research, multimedia projectors and computer assisted instruction. Technology helps make instruction relevant and exciting and promotes engagement and learning. It reinforces cross discipline information and inter-school collaboration.

PART V – Curriculum and Instruction

5. Professional Development

Professional development at South Texas I.S.D. and at the Science Academy reflects the mission and vision of the school. The teachers and the individual departments determine professional development needs. These needs are driven by the Academic Excellence Indicator System (AEIS) data, by SAT and ACT scores for our school, by AP results for the different courses tested, by curricular changes to our sequence of courses, by technological implementations, by certification requirements, by our Campus Improvement Plan (CIP), or simply by the need to learn.

The district is supportive of our professional development efforts by providing funding within the school's budget for expenditures in this area. Annually, four staff development days are scheduled on the district's school calendar for professional training or workshops. Professional development sessions on technology are offered throughout the school year including some during the summer.

One of the most comprehensive initiatives utilized in addressing student achievement has been a partnership between South Texas ISD and the Charles Dana Center. For the past two years, staff development has focused on working with Algebra 1 and Integrated Physics and Chemistry teachers and district administrators in analyzing data and making instructional and curricular decisions that promote student success. These staff development sessions have been held over and beyond those designated on the district calendar.

Another comprehensive staff development partnership has been established with Certiport to increase staff knowledge in computer and Internet basics. With Certiport, all teachers and students strive to receive **Internet and Computing Core Certification (IC3)** by demonstrating sufficient Internet and computing literacy skills, based on national standards.

Teachers who teach pre-AP and AP classes are asked to attend College Board AP training sessions during the school year or summer. Teachers teaching Gifted & Talented classes choose to attend AP training held in different cities throughout the state or attend GT sessions sponsored by the regional service center. Teachers are also given the opportunity to attend professional development conferences by department. The teachers within departments are encouraged to attend state and national conferences together to promote team building and camaraderie as well as learn content and pedagogy.

Texas Assessment of Academic Skills (TAAS) and
Texas Assessment of Knowledge & Skills (TAKS)

Reading/Language Arts – Grade 10

	2003-2004	2002-2003	2001-2002	2000-2001	1999-2000
Testing Month	May	May	Feb	Feb	Feb
School Scores					
• % Meeting Standard	95.0	93.0	97.7	97.7	99.3
• % Commended Performance	7.0	20.0	*	*	*
• % Not Meeting Standard	5.0	7.0	2.3	2.3	0.7
Number of students tested	144	122	155	165	*
Percent of students tested	100	99.3	89.8	95.8	98.7
# of students alternatively assessed	0	0	0	0	0
% of students alternatively assessed	0	0	0	0	0
Subgroup Scores					
Hispanic - # of students tested	96	79	101	106	*
• % Meeting Standard	97.0	91.0	98.4	97.0	89.9
• % Commended Performance	18.0	19.0	*	*	*
• % Not Meeting Standard	3.0	9.0	1.6	3.0	1.1
White - # of students tested	35	36	43	51	*
• % Meeting Standard	89.0	97.0	96.8	98.3	100
• % Commended Performance	25.0	17.0	*	*	*
• % Not Meeting Standard	11.0	3.0	3.2	1.7	0.0
Asian/Pacific Islanders - # tested	12	7	11	8	*
• % Meeting Standard	100	90.0	95.0	100	100
• % Commended Performance	38.0	36.0	*	*	*
• % Not Meeting Standard	0.0	10.0	5.0	0.0	0.0
Econ. Disadvantaged - # tested	59	51	65	68	*
• % Meeting Standard	95.0	89.0	97.2	97.6	100
• % Commended Performance	17.0	17.0	*	*	*
• % Not Meeting Standard	5.0	11.0	2.8	2.4	0.0
Limited Eng. Proficient - # tested	0	6	0	0	*
• % Meeting Standard	**	67.0	**	**	**
• % Commended Performance	**	1.0	**	**	**
• % Not Meeting Standard	**	33.0	**	**	**
State Scores					
• % Meeting Standard	76.0	70.0	93.0	89.5	90.5
• % Commended Performance	20.0	16.0	*	*	*
• % Not Meeting Standard	24.0	30.0	7.0	10.5	9.5

* Information not found, not given, or does not exist.

** Not enough students tested for testing service to give information.

*** All students take state assessment (TAAS/TAKS). Only exception was on 2004 11th grade data in math and Rdg./Language Arts.

Texas Assessment of Academic Skills (TAAS) and
Texas Assessment of Knowledge & Skills (TAKS)

Mathematics – Grade 10

	2003-2004	2002-2003	2001-2002	2000-2001	1999-2000
Testing Month	May	May	Feb	Feb	Feb
School Scores					
• % Meeting Standard	94.0	89.0	99.4	98.7	99.3
• % Commended Performance	29.0	29.0	*	*	*
• % Not Meeting Standard	6.0	11.0	0.6	1.3	0.7
Number of students tested	143	121	155	165	*
Percent of students tested	100	99.3	95.8	98.7	95.1
# of students alternatively assessed	0	0	0	0	0
% of students alternatively assessed	0	0	0	0	0
Subgroup Scores					
Hispanic - # of students tested	96	78	101	106	*
• % Meeting Standard	92.0	87.0	99.0	98.8	98.9
• % Commended Performance	35.0	24.0	*	*	*
• % Not Meeting Standard	8.0	13.0	1.0	1.2	1.1
White - # of students tested	34	36	43	51	*
• % Meeting Standard	97.0	91.0	100	98.2	100
• % Commended Performance	48.0	31.0	*	*	*
• % Not Meeting Standard	3.0	9.0	0.0	1.8	0.0
Asian/Pacific Islanders - # tested	12	7	11	8	*
• % Meeting Standard	100	100	100	100	100
• % Commended Performance	74.0	58.0	*	*	*
• % Not Meeting Standard	0.0	0.0	0.0	0.0	0.0
Econ. Disadvantaged - # tested	59	51	65	68	*
• % Meeting Standard	96.0	87.0	98.1	100	100
• % Commended Performance	34.0	24.0	*	*	*
• % Not Meeting Standard	4.0	13.0	1.9	0.0	0.0
Limited Eng. Proficient - # tested	0	6	0	0	*
• % Meeting Standard	**	83.0	**	**	**
• % Commended Performance	**	0.6	**	**	**
• % Not Meeting Standard	**	17.0	**	**	**
State Scores					
• % Meeting Standard	64.0	61.0	92.2	89.3	86.8
• % Commended Performance	17.0	12.0	*	*	*
• % Not Meeting Standard	36.0	39.0	7.8	10.7	13.2

* Information not found, not given, or does not exist.

** Not enough students tested for testing service to give information.

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NORM REFERENCED ASSESSMENT

Grade: 12

Test: SAT Verbal

Edition/Publication Year: 2000-2004

Publisher: College Board

What groups were excluded from testing? None

Why, and how were they assessed? SAT is a self-selected test taken by junior and senior students.

Scores are reported here as (check one): NCEs ☐ Scaled Scores ☒ Percentiles ☐

	2003-2004	2002-2003	2001-2002	2000-2001	1999-2000
Testing Month (Sept. – June)					
School Scores	565	557	566	539	556
Total Score	1140	1135	1147	1102	1126
Number of students tested	116	129	122	115	108
% of total students tested	89	96	97	96	95
% of students taking at least 1 test	100	100	100	100	100
# of students excluded	NA	NA	NA	NA	NA
% of students excluded	NA	NA	NA	NA	NA
Subgroup Scores					
Asian/Pacific Islander	**	**	560	518	594
Hispanic or Latino	**	**	548	523	522
White	**	**	608	554	625

** Information not found or not given

If reports use scaled scores, provide the national score (mean score) and standard deviation for the total test and each subtest.

	2003-2004	2002-2003	2001-2002	2000-2001	1999-2000
Testing Month (Sept. – June)					
National Scores	508	507	504	506	501
Total Score	1027	1026	1020	1020	1002
Number of students tested	1,419,007	1,406,324	1,327,831	1,276,320	1,327,831
Texas Scores	493	493	491	493	491
Total Score	992	993	991	992	988
Number of students tested	127,723	124,571	116,457	111,277	112,437

NORM REFERENCED ASSESSMENT

Grade: 12

Test: SAT Math

Edition/Publication Year: 2000-2004

Publisher: College Board

What groups were excluded from testing? None

Why, and how were they assessed? SAT is a self-selected test taken by junior and senior students.

Scores are reported here as (check one): NCEs ☐ Scaled Scores ☒ Percentiles ☐

	2003-2004	2002-2003	2001-2002	2000-2001	1999-2000
Testing Month (Sept. – June)					
School Scores	575	578	581	563	570
Total Score	1140	1135	1147	1102	1126
Number of students tested	116	129	122	115	108
% of total students tested	89	96	97	96	95
% of students taking at least 1 test	100	100	100	100	100
# of students excluded	NA	NA	NA	NA	NA
% of students excluded	NA	NA	NA	NA	NA
Subgroup Scores					
Asian/Pacific Islander	**	**	560	518	594
Hispanic or Latino	**	**	548	523	522
White	**	**	608	554	625

** Information not found or not given

If reports use scaled scores, provide the national score (mean score) and standard deviation for the total test and each subtest.

	2003-2004	2002-2003	2001-2002	2000-2001	1999-2000
Testing Month (Sept. – June)					
National Scores	518	519	516	514	501
Total Score	1027	1026	1020	1020	1002
Number of students tested	1,419,007	1,406,324	1,327,831	1,276,320	1,327,831
Texas Scores	499	500	500	499	497
Total Score	992	993	991	992	988
Number of students tested	127,723	124,571	116,457	111,277	112,437

NORM REFERENCED ASSESSMENT

Grade: 12

Test: ACT English

Edition/Publication Year: 2000-2004

Publisher: ACT Assessments

What groups were excluded from testing? None

Why, and how were they assessed? ACT is a self-selected test taken by junior and senior students.

Scores are reported here as (check one): NCEs ☐ Scaled Scores ☒ Percentiles ☐

	2003-2004	2002-2003	2001-2002	2000-2001	1999-2000
Testing Month (Sept. – June)					
School Scores	23.3	23.4	23.6	22.1	22.9
Total Score					
Number of students tested	59	91	82	67	71
% of total students tested	45	68	65	56	62
# of students taking at least 1 test	100	100	100	100	100
# of students excluded	NA	NA	NA	NA	NA
% of students excluded	NA	NA	NA	NA	NA
Subgroup Scores					
Asian/Pacific Islander	**	**	**	**	**
Hispanic or Latino	**	**	**	**	**
White	**	**	**	**	**

** Information not found or not given

If reports use scaled scores, provide the national score (mean score) and standard deviation for the total test and each subtest.

	2003-2004	2002-2003	2001-2002	2000-2001	1999-2000
Testing Month (Sept. – June)					
National Scores	21.5	21.4	21.4	21.5	21.5
Total Score					
Number of students tested	1,066,618	1,078,273	1,041,140	1,015,179	1,022,158
Texas Scores	20.0	19.9	19.9	20.2	220.4
Total Score					
Number of students tested	64,770	66,663	62,983	65,179	64,999

NORM REFERENCED ASSESSMENT

Grade: 12

Test: ACT Math

Edition/Publication Year: 2000-2004

Publisher: ACT Assessments

What groups were excluded from testing? None

Why, and how were they assessed? ACT is a self-selected test taken by junior and senior students.

Scores are reported here as (check one): NCEs ☐ Scaled Scores ☒ Percentiles ☐

	2003-2004	2002-2003	2001-2002	2000-2001	1999-2000
Testing Month (Sept. – June)					
School Scores	26.3	25.6	25.3	23.9	23.5
Total Score					
Number of students tested	59	91	82	67	71
% of total students tested	45	68	65	56	62
# of students taking at least 1 test	100	100	100	100	100
# of students excluded	NA	NA	NA	NA	NA
% of students excluded	NA	NA	NA	NA	NA
Subgroup Scores					
Asian/Pacific Islander	**	**	**	**	**
Hispanic or Latino	**	**	**	**	**
White	**	**	**	**	**

** Information not found or not given

If reports use scaled scores, provide the national score (mean score) and standard deviation for the total test and each subtest.

	2003-2004	2002-2003	2001-2002	2000-2001	1999-2000
Testing Month (Sept. – June)					
National Scores	21.7	25.6	25.3	23.9	23.5
Total Score					
Number of students tested	1,066,618	1,078,273	1,041,140	1,015,179	1,022,158
Texas Scores	20.7	20.5	20.6	20.8	21.0
Total Score					
Number of students tested	64,770	66,663	62,983	65,179	64,999

Texas Assessment of Academic Skills (TAAS) and
Texas Assessment of Knowledge & Skills (TAKS)

Reading/Language Arts – Grade 9

	2003-2004	2002-2003	2001-2002	2000-2001	1999-2000
Testing Month	May	May	*	*	*
School Scores					
• % Meeting Standard	100	97.0	*	*	*
• % Commended Performance	31.0	20.0	*	*	*
• % Not Meeting Standard	0.0	3.0	*	*	*
Number of students tested	174	175	*	*	*
Percent of students tested	100	99.3	*	*	*
# of students alternatively assessed	0	0	0	0	0
% of students alternatively assessed	***	***	*	*	*
Subgroup Scores					
Hispanic - # of students tested	115	111			
• % Meeting Standard	100	96.0	*	*	*
• % Commended Performance	18.0	19.0	*	*	*
• % Not Meeting Standard	0.0	4.0	*	*	*
White - # of students tested	44	47			
• % Meeting Standard	100	98.0	*	*	*
• % Commended Performance	25.0	17.0	*	*	*
• % Not Meeting Standard	0.0	2.0	*	*	*
Asian/Pacific Islanders - # tested	15	17			
• % Meeting Standard	100	94.0	*	*	*
• % Commended Performance	38.0	36.0	*	*	*
• % Not Meeting Standard	0.0	6.0	*	*	*
Econ. Disadvantaged - # tested	72	70			
• % Meeting Standard	100	97.0	*	*	*
• % Commended Performance	17.0	17.0	*	*	*
• % Not Meeting Standard	0.0	3.0	*	*	*
Limited Eng. Proficient - # tested	0	0			
• % Meeting Standard	100	73.0	*	*	*
• % Commended Performance	11.0	1.0	*	*	*
• % Not Meeting Standard	0.0	27.0	*	*	*
State Scores					
• % Meeting Standard	85.0	76.0	*	*	*
• % Commended Performance	20.0	16.0	*	*	*
• % Not Meeting Standard	15.0	24.0	*	*	*

* Information not found, not given, or does not exist.

** Not enough students tested for testing service to give information.

*** All students take state assessment (TAAS/TAKS). Only exception was on 2004 11th grade data in math and Rdg./Language Arts.

Texas Assessment of Academic Skills (TAAS) and
Texas Assessment of Knowledge & Skills (TAKS)

Reading/Language Arts– Grade 11

	2003-2004	2002-2003	2001-2002	2000-2001	1999-2000
Testing Month	May	May	*	*	*
School Scores					
• % Meeting Standard	100	91.0	*	*	*
• % Commended Performance	28.0	20.0	*	*	*
• % Not Meeting Standard	0.0	9.0	*	*	*
Number of students tested	95	123	*	*	*
Percent of students tested	92.0	99.3	*	*	*
# of students alternatively assessed	5	0	0	0	0
% of students alternatively assessed	5.0	***	*	*	*
Subgroup Scores					
Hispanic - # of students tested	63	80			
• % Meeting Standard	100	91.0	*	*	*
• % Commended Performance	18.0	19.0	*	*	*
• % Not Meeting Standard	0.0	9.0	*	*	*
White - # of students tested	24	34			
• % Meeting Standard	100	90.0	*	*	*
• % Commended Performance	25.0	17.0	*	*	*
• % Not Meeting Standard	0.0	10.0	*	*	*
Asian/Pacific Islanders - # tested	8	9			
• % Meeting Standard	100	100	*	*	*
• % Commended Performance	38.0	36.0	*	*	*
• % Not Meeting Standard	0.0	0.0	*	*	*
Econ. Disadvantaged - # tested	39	49			
• % Meeting Standard	100	86.0	*	*	*
• % Commended Performance	17.0	17.0	*	*	*
• % Not Meeting Standard	0.0	14.0	*	*	*
Limited Eng. Proficient - # tested	0	0			
• % Meeting Standard	**	**	*	*	*
• % Commended Performance	**	**	*	*	*
• % Not Meeting Standard	**	**	*	*	*
State Scores					
• % Meeting Standard	87.0	70.0	*	*	*
• % Commended Performance	20.0	16.0	*	*	*
• % Not Meeting Standard	13.0	30.0	*	*	*

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Texas Assessment of Academic Skills (TAAS) and
Texas Assessment of Knowledge & Skills (TAKS)

Mathematics – Grade 9

	2003-2004	2002-2003	2001-2002	2000-2001	1999-2000
Testing Month	May	May	*	*	*
School Scores					
• % Meeting Standard	92.0	88.0	*	*	*
• % Commended Performance	48.0	29.0	*	*	*
• % Not Meeting Standard	8.0	12.0	*	*	*
Number of students tested	174	173	*	*	*
Percent of students tested	100	99.3	*	*	*
# of students alternatively assessed	0	0	0	0	0
% of students alternatively assessed	***	***	*	*	*
Subgroup Scores					
Hispanic - # of students tested	115	111			
• % Meeting Standard	89.0	84.0	*	*	*
• % Commended Performance	35.0	24.0	*	*	*
• % Not Meeting Standard	11.0	16.0	*	*	*
White - # of students tested	44	49			
• % Meeting Standard	100	91.0	*	*	*
• % Commended Performance	48.0	31.0	*	*	*
• % Not Meeting Standard	0.0	9.0	*	*	*
Asian/Pacific Islanders - # tested	15	13			
• % Meeting Standard	100	100	*	*	*
• % Commended Performance	74.0	58.0	*	*	*
• % Not Meeting Standard	0.0	0.0	*	*	*
Econ. Disadvantaged - # tested	72	69			
• % Meeting Standard	88.0	82.0	*	*	*
• % Commended Performance	34.0	24.0	*	*	*
• % Not Meeting Standard	12.0	18.0	*	*	*
Limited Eng. Proficient - # tested	0	0			
• % Meeting Standard	86.0	64.0	*	*	*
• % Commended Performance	33.0	6.0	*	*	*
• % Not Meeting Standard	14.0	36.0	*	*	*
State Scores					
• % Meeting Standard	61.0	55.0	*	*	*
• % Commended Performance	17.0	12.0	*	*	*
• % Not Meeting Standard	39.0	45.0	*	*	*

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Texas Assessment of Academic Skills (TAAS) and
Texas Assessment of Knowledge & Skills (TAKS)

Mathematics – Grade 11

	2003-2004	2002-2003	2001-2002	2000-2001	1999-2000
Testing Month	May	May	*	*	*
School Scores					
• % Meeting Standard	100	97.0	*	*	*
• % Commended Performance	51.0	29.0	*	*	*
• % Not Meeting Standard	0.0	3.0	*	*	*
Number of students tested	95	130	*	*	*
Percent of students tested	92.0	99.3	*	*	*
# of students alternatively assessed	5	0	0	0	0
% of students alternatively assessed	***	***	*	*	*
Subgroup Scores					
Hispanic - # of students tested	63	84			
• % Meeting Standard	100	98.0	*	*	*
• % Commended Performance	35.0	24.0	*	*	*
• % Not Meeting Standard	0.0	2.0	*	*	*
White - # of students tested	24	36			
• % Meeting Standard	100	95.0	*	*	*
• % Commended Performance	48.0	31.0	*	*	*
• % Not Meeting Standard	0.0	5.0	*	*	*
Asian/Pacific Islanders - # tested	8	10			
• % Meeting Standard	100	100	*	*	*
• % Commended Performance	74.0	58.0	*	*	*
• % Not Meeting Standard	0.0	0.0	*	*	*
Econ. Disadvantaged - # tested	39	52			
• % Meeting Standard	100	96.0	*	*	*
• % Commended Performance	34.0	24.0	*	*	*
• % Not Meeting Standard	0.0	4.0	*	*	*
Limited Eng. Proficient - # tested	0	0			
• % Meeting Standard	**	**	*	*	*
• % Commended Performance	**	**	*	*	*
• % Not Meeting Standard	**	**	*	*	*
State Scores					
• % Meeting Standard	85.0	68.0	*	*	*
• % Commended Performance	17.0	12.0	*	*	*
• % Not Meeting Standard	15.0	32.0	*	*	*

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